

## **A short overview of Surgery Theory I**

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### **Abstract:**

Surgery theory is one of the most powerful tools for the classification of manifolds in differential topology. In the first of two talks, we will define surgery on manifolds and have a look at the homotopy properties of the resulting manifolds and cobordisms. The h- and s-cobordism theorems will be discussed in order to state the surgery program and normal invariants will be introduced. In the second talk, we will start with surgery on (normal) maps and state the results for surgery below the middle dimension. We will briefly discuss surgery obstruction in the middle dimension and look at some applications of the surgery method in the simply connected case.

Monday, November 5, 2018, 16:00

MathII 0.101 (Lonza)